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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,146	04/08/2004	Cary Lee Bates	ROC920030419US1	8972
Grant A. Johnson	7590 06/21/200 O n	EXAMINER		
IBM Corporatio		KISS, ERIC B		
3605 Highway 52 North Rochester, MN 55901-7829			ART UNIT	PAPER NUMBER
·			2192	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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•	Application No.	Applicant(s)			
	10/821,146	BATES ET AL.			
Office Action Summary	Examiner	Art Unit			
	Eric B. Kiss	2192			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period realiure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on <u>08 A</u>	1) Responsive to communication(s) filed on <u>08 April 2004</u> .				
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.				
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	:				
4) Claim(s) 1-20 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/o	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on 08 April 2004 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E)⊠ accepted or b)⊡ objected to drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). vjected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicat prity documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892)	4) Interview Summan				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 	Paper No(s)/Mail D 5) Notice of Informal I 6) Other:				

Application/Control Number: 10/821,146

Art Unit: 2192

DETAILED ACTION

1. Claims 1-20 have been examined.

Claim Objections

2. Claims 4, 7, 10, and 13 are objected to because of the following informalities: the unconventional phrase, "doing debug" should be replaced with more formal language consistent with the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 5-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se. In re Warmerdam*, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1760 (claim to a data structure per se held nonstatutory).

Art Unit: 2192

Data structures not claimed as embodied in computer-readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. *See*, *e.g.*, *In re Warmerdam*, 33 F.3d 1354, 1361, 31 USPQ2d 1754, 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, *i.e.*, the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. *See In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035.

Claims 5-8 recite an "apparatus" comprising a series of means that can be reasonably interpreted as software, *per se*. The claim does not define any structural and functional interrelationships between the software elements and a computer that would permit the described

Application/Control Number: 10/821,146 Page 4

Art Unit: 2192

functionality to be realized when the software is employed as a computer component.

Accordingly, claims 5-8 appear to merely set forth functional descriptive material *per se*, which is nonstatutory.

Claims 9-12 set forth signal-bearing media encoded with instructions. Applicant's specification defines "computer-readable media" as embracing communication media embodiments, reasonably interpreted to include signals encoded with functional descriptive material. (Specification p. 10, lines 2-12.) The Office's current position is that claims involving signals encoded with functional descriptive material do not fall within any of the categories of patentable subject matter set forth in 35 U.S.C. § 101, and such claims are therefore ineligible for patent protection. *See* 1300 OG 142 (November 22, 2005) (in particular, see Annex IV(c)).

5. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. §101 (non-statutory) above are further rejected as set forth below in anticipation of Applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 112

- 6. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 7. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Application/Control Number: 10/821,146

Art Unit: 2192

Applicant's specification does not adequately define what is meant by the terms "incorrect", "older", or "newer" in the context of the recited determining steps or how a determination may be made as to whether a particular file or class may be determined to be "incorrect", "older", or "newer". The only apparent description of such functionality is in reference to FIG. 5B step 560 (See Specification at p. 13, lines 18-21 (merely repeating the desired functionality without describing how it is achieved).

Applicant's specification does not adequately define what is meant by a user "doing debug" or how a determination may be made as to whether such a user "owns" the first/second file/class. The only apparent description of such functionality is in reference to FIG. 5B step 575 (See Specification at p. 14, lines 2-5 (merely repeating the desired functionality without describing how it is achieved).

Further, while the specification illustrates "exemplary" user interfaces (FIGS. 2 through 4), no description in the specification recites the necessary steps to acquire and display such information (See Specification at p. 10, line 24, through p. 12, line 20 (merely describing desired features of pictoral representations of exemplary user interfaces).

Undue experimentation would be required by one of ordinary skill in the art in making or using the claimed invention because the necessary steps in creating any working implementation of the invention are well beyond the scope of the disclosure. One attempting to make or use the claimed invention would be left entirely on their own to come up with the algorithm necessary to start with an event handler capable of receiving an add class event (step 510) and a class path (step 515) and produce appropriate determinations as to whether a current class is "newer" (by an unspecified standard) or "owned by a user doing debug" necessary to enable the generation of

Page 6

Art Unit: 2192

a warning (along with a stored reason for the warning). As noted above, while applicant's specification and drawings suggest high-level steps of determining whether a class is "newer" and "owned by a user doing debug", each of these steps would require several sub-steps, and the lack of guidance in the disclosure as to what these sub-steps are would necessitate undue experimentation to achieve a working implementation.

- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 1-4, 6-9, 11, and 14-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following phrases are indefinite: "if the determining is true" (claim 1); "if the means for determining is true" (claim 6); "if the means for deciding is true" (claim 7); "if the determining is true" (claim 9); "if the deciding is true" (claim 11); "if the deciding is true" (claim 14); "if the determining is true" (claim 16); "if the determining is true" (claim 17). Because determining and deciding appear to be functional steps, it is unclear what it means for such functions to be "true". The language in these claims appears to confuse that acts of deciding and determining with results produced by such acts. Further, the claims do not clearly correlate the determining and deciding acts with the production of a Boolean (true/false) value.

The term "incorrect" in claims 1-4 is a relative term which renders the claim indefinite.

The term "incorrect version" is not defined by the claim, the specification does not provide a

standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Regarding claims 17-20, it is unclear what concrete steps are required by the various "configuring" steps recited in these claims. The specification appears to describe "configuring"/ "configuration(s)" in the context of hardware arrangements and processing architectures.

Accordingly, it is not clear whether applicant intends these claims to cover: (1) merely creating a hardware arrangement capable of carrying out the described functions (if programmed to do so at some later time); (2) some programmed computer executing software necessary to carry out the described functions; or (3) the mere act of writing a program. As the intended scope of these claims is not clearly ascertainable, these claims are indefinite.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claim 1, as best understood, is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,442,753 (GERARD et al.).

Gerard et al. discloses determining whether a first file to be used is an incorrect version; and if the determining is true, issuing a warning (see, e.g., col. 7, line 49, through col. 8, line 4 (describing returning an error if a version checker determines a class dependency problem); col. 10, lines 37-40 (describing displaying a warning instead of generating an error)).

Application/Control Number: 10/821,146 Page 8

Art Unit: 2192

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature should be directed to the TC 2100 Group receptionist: 571-272-2100.

Eric B. Kiss

June 15, 2007

3.2